

Regional HIV/AIDS Epidemiologic Profile of Western HSR, Massachusetts: 2014

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2014, this resulted in the removal of 4,135 HIV/AIDS cases, of which 973 have died and 3,162 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual reported risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual reported risk category was used with the intention of identifying HIV reported risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of men living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual reported risk category. The application of the presumed heterosexual reported risk category to men is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate reported risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual reported risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2013: Western HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	2,069	56%
People Reported with HIV or AIDS who are Deceased	1,597	44%
Total Number of People Reported with HIV Infection or AIDS	3,666	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 2. Average annual rate of HIV infection diagnosis from 2010 to 2012 and HIV/AIDS prevalence rate on 12/31/13¹: Western HSR, Massachusetts²

Average annual HIV diagnosis rate from 2010–2012	Average rate per 100,000	Average annual number of HIV diagnoses
Western HSR, MA	9.3	77.7
Massachusetts Total	10.5	688.3
HIV/AIDS prevalence rate on 12/31/13	Rate per 100,000	Number of people living with HIV/AIDS
Western HSR, MA	248.7	2,069
Massachusetts Total	292.7	19,165

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2003–2012, Western HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2003	1,624	53	100
2004	1,689	56	121
2005	1,736	50	97
2006	1,785	43	92
2007	1,822	42	79
2008	1,857	41	76
2009	1,876	45	64
2010	1,919	33	76
2011	1,960	28	69
2012	2,023	25	88

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size for the assurance of confidentiality. Additional values may be suppressed to prevent back calculation.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 4. People diagnosed with HIV infection from 2010–2012¹ and people living with HIV/AIDS on December 31, 2013 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Western HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	167	72%	1,328	64%
Female	66	28%	741	36%
Place of Birth:	N	%	N	%
US	168	72%	1,449	70%
Puerto Rico/US Dependency ³	42	18%	491	24%
Non-US	23	10%	129	6%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	-- ⁷	-- ⁷	646	31%
Black (non-Hispanic)	55	24%	417	20%
Hispanic/Latino	96	41%	978	47%
Asian/Pacific Islander	-- ⁷	-- ⁷	16	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	93	40%	552	27%
Injection Drug Use (IDU)	28	12%	568	27%
MSM/IDU	-- ⁷	-- ⁷	69	3%
Heterosexual Sex	29	12%	366	18%
Other	-- ⁷	-- ⁷	59	3%
Total Undetermined	76	33%	455	22%
• Presumed Heterosexual Sex ⁴	28	12%	176	9%
• Undetermined ⁵	48	21%	279	13%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2013	
Under 13	1	<1%	2	<1%
13 to 19	9	4%	12	1%
20 to 24	30	13%	53	3%
25 to 29	29	12%	75	4%
30 to 34	26	11%	102	5%
35 to 39	32	14%	149	7%
40 to 44	22	9%	215	10%
45 to 49	34	15%	363	18%
50 to 54	21	9%	434	21%
55 to 59	11	5%	311	15%
60+	18	8%	353	17%
Total⁶	233	100%	2,069	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 5. People living with HIV/AIDS on December 31, 2013 by gender and race/ethnicity: Western HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	485	37%	161	22%
Black (non-Hispanic)	240	18%	177	24%
Hispanic/Latino	585	44%	393	53%
Asian/Pacific Islander	11	1%	5	1%
Total²	1,328	100%	741	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 6. People living with HIV/AIDS on December 31, 2013 by gender and exposure mode: Western HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	552	42%	N/A	N/A
Injection drug use (IDU)	363	27%	205	28%
MSM/IDU	69	5%	N/A	N/A
Heterosexual sex	82	6%	284	38%
Other	34	3%	25	3%
Total Undetermined	228	17%	227	31%
• Presumed heterosexual sex ²	N/A	N/A	176	24%
• Undetermined ³	228	17%	51	7%
Total	1,328	100%	741	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Western HSR, Massachusetts¹, 2003–2012²

	Male		Female		Total
	N	%	N	%	
2003	65	65%	35	35%	100
2004	76	63%	45	37%	121
2005	60	62%	37	38%	97
2006	57	62%	35	38%	92
2007	52	66%	27	34%	79
2008	54	71%	22	29%	76
2009	51	80%	13	20%	64
2010	54	71%	22	29%	76
2011	47	68%	22	32%	69
2012	66	75%	22	25%	88

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Western HSR, Massachusetts¹, 2003–2012²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2003	32	32%	20	20%	45	45%	100
2004	27	22%	36	30%	57	47%	121
2005	26	27%	22	23%	45	46%	97
2006	27	29%	14	15%	49	53%	92
2007	26	33%	18	23%	34	43%	79
2008	27	36%	17	22%	29	38%	76
2009	25	39%	13	20%	24	38%	64
2010	31	41%	12	16%	33	43%	76
2011	22	32%	16	23%	28	41%	69
2012	26	30%	27	31%	35	40%	88

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Western HSR, Massachusetts¹, 2003–2012²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2003	76	76%	17	17%	7	7%	100
2004	73	60%	33	27%	15	12%	121
2005	61	63%	26	27%	10	10%	97
2006	60	65%	22	24%	10	11%	92
2007	54	68%	17	22%	8	10%	79
2008	56	74%	14	18%	6	8%	76
2009	51	80%	8	13%	5	8%	64
2010	58	76%	12	16%	6	8%	76
2011	49	71%	12	17%	8	12%	69
2012	61	69%	18	20%	9	10%	88

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Western HSR, Massachusetts¹, 2003–2012²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2003	27	27%	21	21%	-- ⁵	-- ⁵	18	18%	-- ⁵	-- ⁵	13	13%	15	15%	100
2004	22	18%	27	22%	-- ⁵	-- ⁵	24	20%	-- ⁵	-- ⁵	15	12%	26	21%	121
2005	26	27%	28	29%	-- ⁵	-- ⁵	14	14%	-- ⁵	-- ⁵	11	11%	17	18%	97
2006	29	32%	23	25%	-- ⁵	-- ⁵	11	12%	-- ⁵	-- ⁵	14	15%	14	15%	92
2007	24	30%	13	16%	-- ⁵	-- ⁵	11	14%	-- ⁵	-- ⁵	11	14%	18	23%	79
2008	30	39%	10	13%	-- ⁵	-- ⁵	10	13%	-- ⁵	-- ⁵	8	11%	17	22%	76
2009	30	47%	5	8%	-- ⁵	-- ⁵	5	8%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	20	31%	64
2010	29	38%	13	17%	-- ⁵	-- ⁵	11	14%	-- ⁵	-- ⁵	5	7%	16	21%	76
2011	25	36%	12	17%	-- ⁵	-- ⁵	8	12%	-- ⁵	-- ⁵	9	13%	14	20%	69
2012	39	44%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	10	11%	-- ⁵	-- ⁵	14	16%	18	20%	88

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Western HSR, Massachusetts¹, 2003–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2003	30	100	30%
2004	40	121	33%
2005	38	97	39%
2006	22	92	24%
2007	30	79	38%
2008	21	76	28%
2009	18	64	28%
2010	29	76	38%
2011	20	69	29%
2012	27	88	31%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

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Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Western HSR, Massachusetts,¹ 2010–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	50	167	30%
Female	26	66	39%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	25	79	32%
Black (non-Hispanic)	22	55	40%
Hispanic/Latino	27	96	28%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	51	168	30%
Puerto Rico/US Dependencies ⁴	14	42	33%
Non-US	11	23	48%
Total	76	233	33%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14